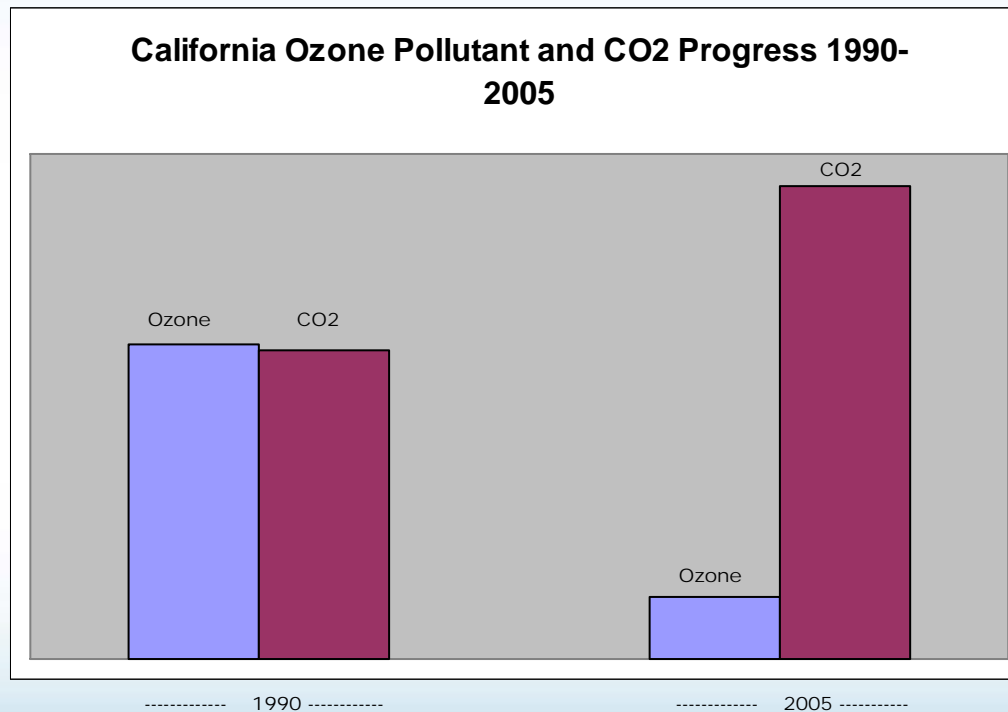

California Renewable Fuels Partnership

E6 through E95

The need for a flexible competitive
fungible fuel system for increased use
of Ethanol

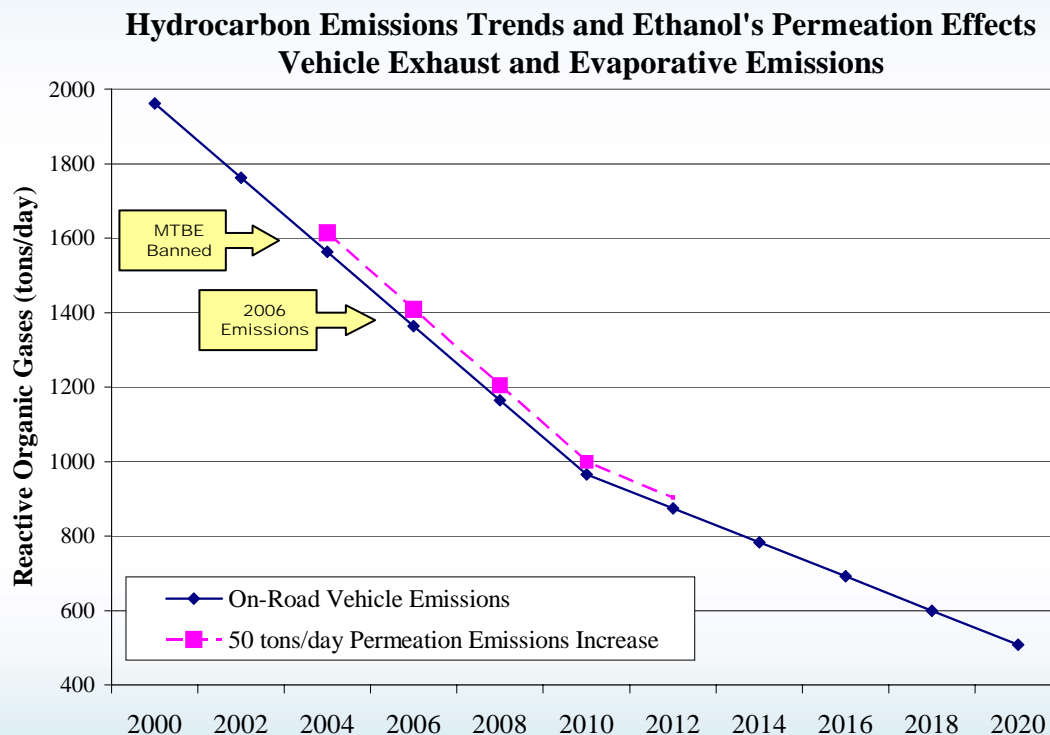
CO2 a new and key air pollutant.
Ozone trending down. CO2 trending up.



Current and Future CO2 reductions with ethanol use in California

- ★ Current E6 provides 3.5 million tons of CO2 reductions per year. The single most effective and largest source of CO2 reductions in California transportation today.
- ★ Year round E10 would reduce more than 6 million tons of CO2 per year.
- ★ E85 CO2 reduction for California dependent on volume use. Over time could be effective.

Perspective: Total emissions from vehicles and fuels including permeation are lower now – and continue to decline than when MTBE was banned.



Source: ARB EMFAC analysis of mobile source emissions for; 2000, 2010, 2020

Perspective: 2004 air quality best on record. 2005 Similar results. E6 and E10 blends due not harm public health.

- ★ Fewest exceedance days ever in South Coast and San Joaquin Valley.
- ★ No days exceeding standard in Bay Area and Sacramento Region.
- ★ 2004 first year with ethanol blended in all California gasoline
- ★ NY, CT had better air quality recorded with Ethanol in 2004 as well.
- ★ 2004 was an average weather year.

E10 – Better Environmental Performance than E6

- ★ Similar Permeation emissions
- ★ Much less VOC and Tailpipe Emissions
- ★ Much Less CO₂ emissions
- ★ Year round flexibility needed
- ★ E85 better environmental performance than E10 given equal total supply volume of ethanol.

Every New Vehicle Flex?

- ★ Auto makers have shown in Brazil that flex is no extra cost to consumer.
- ★ IF every new car were flex within five to ten years California would be ready to fully utilize the increased amount of ethanol production predicted for Cellulosic Ethanol.
- ★ Current to moderate increase will have negligible impact on significant CO₂ or Energy security benefits.

E6-95 POLICIES NEEDED

- ★ A regulatory framework that increases the flexibility of refiners and marketers to use more ethanol (E6 through E95) AND insures no backsliding on CO2 reductions associated with current use.
- ★ Year round flexibility to use E6 through E10 at refiners choice like the rest of the country.
- ★ Fully Fungible CARBOB essential for such flexibility.
- ★ Dramatic increase in Flex vehicles needed to make E10-95 blends a legitimate strategy for CO2 reduction and energy security.